

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
23 June 2005 (23.06.2005)

PCT

(10) International Publication Number  
**WO 2005/057748 A1**

(51) International Patent Classification<sup>7</sup>: **H01T 19/00**,  
B03C 3/09

(21) International Application Number:  
PCT/SE2004/001895

(22) International Filing Date:  
15 December 2004 (15.12.2004)

(25) Filing Language: Swedish

(26) Publication Language: English

(30) Priority Data:  
0303349-5 15 December 2003 (15.12.2003) SE

(71) Applicant and

(72) Inventor: **LORETH, Andrzej** [SE/SE]; Fiskare Gustavs  
väg 34, S-184 70 Åkersberga (SE).

(74) Agent: **ERIKSSON, Kjell**; Norrtälje Patentbyrå AB, P.O.  
Box 38, S-761 21 Norrtälje (SE).

(81) Designated States (*unless otherwise indicated, for every  
kind of national protection available*): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

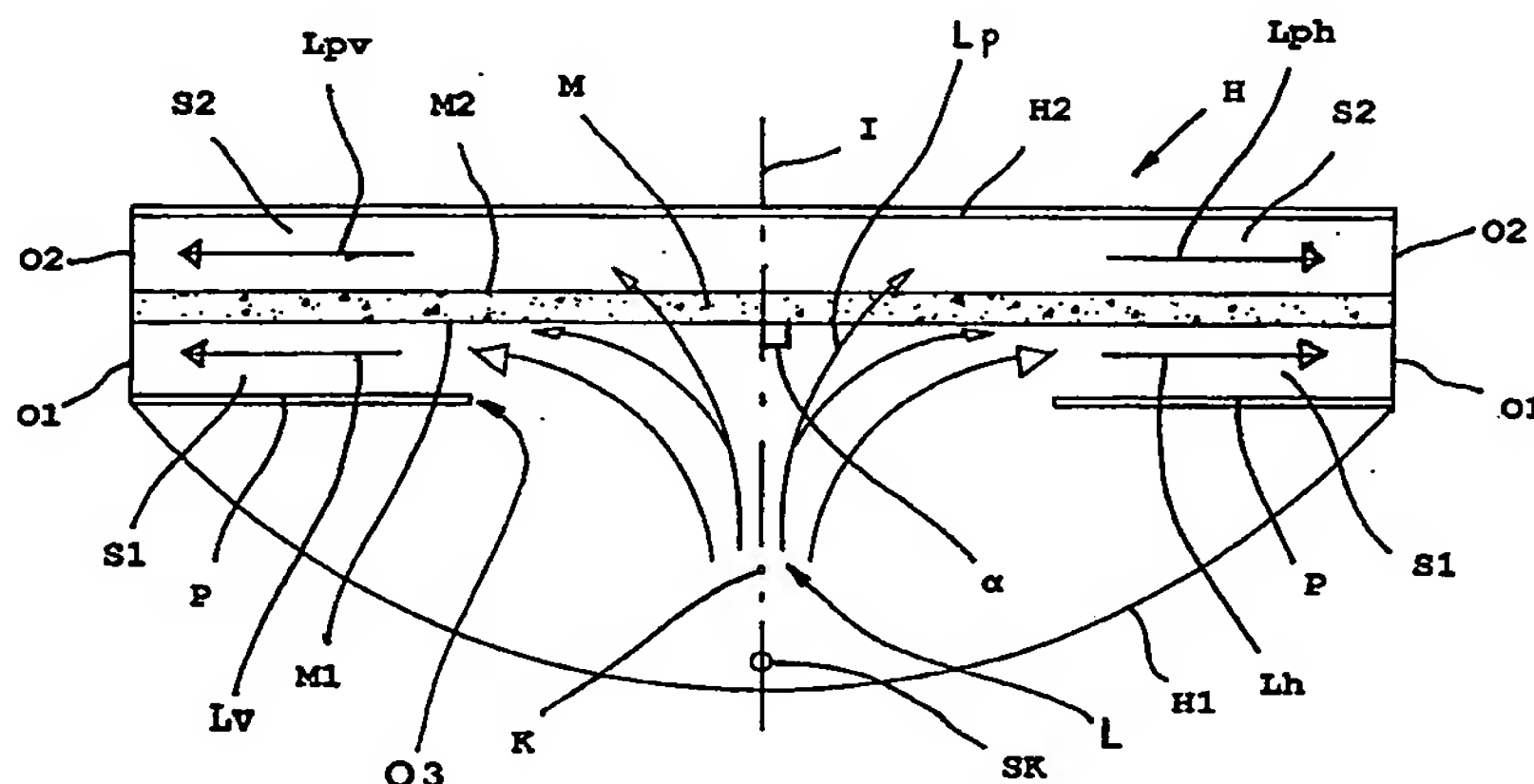
(84) Designated States (*unless otherwise indicated, for every  
kind of regional protection available*): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: **DEVICE AND METHOD FOR TRANSPORT AND CLEANING OF AIR**



(57) Abstract: The present invention relates to a device for transport and cleaning of air by using electric ion wind, said device comprising an elongated corona electrode (K), a target electrode (M) arranged at a distance from the corona electrode (K) and a direct current source that has one terminal connected to the corona electrode (K) and the other terminal to the target electrode (M), the design and voltage of the corona electrode (K) between the mentioned terminals of the direct current source being such that a discharge occurs at the corona electrode (K), said discharge generating air ions, that the target electrode (M) on one hand has an extension in the longitudinal direction of the corona electrode (K) and on the other hand an extension transverse to the longitudinal direction of the corona electrode (K), that the target electrode (M) has a certain permeability to the air flow that is generated between the electrodes (K, M), and that the device has outlet openings (O1, O2) for the air flow. It is significant of the device according to the present invention that an imaginary plane (I) that extends from a centre portion of the target electrode (M) and holds the corona electrode (K) has an extension transverse to the target electrode (M) or portions of the target electrode (M), and that the target electrode (M) comprises an active gas absorbent (Ak).



WO 2005/057748 A1